

What is claimed is:

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- 5 A data network telephony (DNT) system, comprising:
- a base station connected to a DNT-capable data network and to a plurality of wireless transceivers, each transceiver transmitting to a distinct area, the base station adapted to operate the transceivers by a two-way, narrow-band, multiple-channel, real-time duplex radio protocol; and
- a plurality of portable computer-enhanced client communicator
- 10 units, including microphone and speaker apparatus, each assigned a unique address and adapted to communicate with the base station via the transceivers by the two-way real-time radio protocol and to process DNT calls;
- wherein the wireless system operates as a carrier-sense multiple
- 15 access system with collision detection (CSMA/CD).
2. The DNT system of claim 1 wherein a personal router application executes on the client communicators, enabling individual clients to edit routing rules for their own communicator IDs, and to upload the edited rules
- 20 to the base station or one of the transceivers for use in routing incoming calls..

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3. The DNT system of claim 2 wherein the personal router application executes on the base station or one of the transceivers.

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4. The DNT system of claim 1 wherein the base station maintains a routing table listing addresses of communicators operating in the area of each connected transceiver, and updates the routing table in the base station as operating communicators move from one area to another.

5. The system of claim 4 further comprising a hierarchical network of connected routers between the data network and a plurality of base stations each connected to at least one transceiver, each router and base station maintaining a routing table, wherein an operating communicator moving from one area to another causes updating to occur in a minimum number of routers, and wherein each base station is adapted to interact with client communicators in personal routing functions.

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